

Notice of Allowability

Application No.

10/020,116

Examiner

Khanh Dinh

Applicant(s)

ANDO ET AL.

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/18/2006.
2. ☒ The allowed claim(s) is/are 1,4,6,8,11 and 13.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Paul J. Skwierawski (the Undersigned Attorney, Reg. No.32,173) on 1/8/2007.

The application has been amended as follows:

IN THE CLAIMS:

Please **cancel** claims 2, 3, 5, 7, 9, 10, 12 and 14.

Please **amend** claims as follows:

-- Claim 1 (Currently Amended) An appliance located-states accumulating method of accumulating data of a positional relation of individual positions where a plurality of appliances mutually connected through a network are located, comprising:

(a) receiving different classes of state change information from a plurality of different classes of appliances through said network, the state change information being indicative of differing classes of operating state changes of the different classes of appliances;

(b) calculating an occurrence time difference from occurrence times when the differing classes of operating state changes have been detected as having occurred with respect to differing appliances of the differing classes of appliances, in accordance

with occurrence time information indicative of occurrence times of the operating state changes included in the state change information; and

(c) acquiring distance between appliances which incur the operating state changes, based on the calculated occurrence time difference;

wherein said acquiring calculates the positional relation in accordance with the occurrence time difference of the operating state changes occurred in two appliances and relationship weight information indicative of a distance between the two appliances; and,

wherein said relationship weight information is a value calculated by a predetermined expression in accordance with two elements including: number of times of occurring the operating state changes; and the occurrence time difference of the operating state changes occurred in the two appliances.

Claim 2 (Canceled)

Claim 3 (Canceled)

Claim 4 (Currently Amended) An apparatus cooperative with a plurality of appliances mutually connected through a network and for accumulating data of a positional relation of individual positions where the appliances are located, comprising:

a reception means for receiving different classes of state change information from a plurality of different classes of appliances through said network, the state change information indicating operating state changes of the different classes of appliances,

calculation means calculating an occurrence time difference from occurrence times when the different classes of operating state changes have been detected as having occurred with respect to differing appliances of the differing classes of appliances, in accordance with occurrence time information indicative of occurrence times of the operating state changes included in the state change information; and

acquiring means acquiring a distance between appliances which incur the operating state changes, based on the calculated occurrence time difference;

wherein said acquiring means calculates the positional relation in accordance with the occurrence time difference of the operating state changes occurred in two appliances and relationship weight information indicative of a distance between the two appliances; and,

wherein said relationship weight information is a value calculated by a predetermined expression in accordance with two elements including: number of times of occurring the operating state changes; and the occurrence time difference of the operating state changes occurred in the two appliances.

Claim 5 (Canceled)

Claim 6 (Currently Amended) An apparatus according to claim 5, comprising storing means for storing the occurrence time difference of the operating state changes occurred in the two appliances and the relationship weight information indicative of the distance between the two appliances.

Claim 7 (Canceled)

Claim 8 (Currently Amended) A household-appliance located states accumulating method of accumulating data of a positional relation of individual positions where a plurality of household appliances mutually connected throughout a household are located, comprising:

(a) receiving different classes of state change information from a plurality of different classes of appliances through said network, the state change information being indicative of differing classes of operating state changes of the household appliances, where the operating state changes occur responsive to interaction of a person in the household in proximity of ones of the household appliances;

(b) calculating occurrence time differences from occurrence times when the differing classes of operating state changes have been detected as having occurred with respect to differing appliances of the differing classes of appliances, in accordance with occurrence time information indicative of occurrence times of the operating state changes included in the state change information; and

(c) acquiring distance between household appliances which incur the operating state changes in the household, based on the calculated occurrence time differences; wherein said acquiring calculates the positional relation in accordance with the occurrence time difference of the operating state changes occurred in two appliances and relationship weight information indicative of a distance between the two appliances; and,

wherein said relationship weight information is a value calculated by a predetermined expression in accordance with two elements including: number of times of occurring the operating state changes; and the occurrence time difference of the operating state changes occurred in the two appliances.

Claim 9 (Canceled)

Claim 10 (Canceled)

Claim 11 (Currently Amended) A system constituted of a plurality of household appliances mutually connected through a network throughout a household, and for accumulating data of a positional relation of individual positions where the household appliances are located in the household, comprising:

a reception means for receiving different classes of state change information from a plurality of different classes of appliances through said network, the state change information indicating differing classes of operating state changes of the different

classes of household appliances, where the operating state changes occur responsive to interaction of a person in the household in proximity of the household appliance;

calculation means calculating occurrence time differences from occurrence times when the differing classes of operating state changes have been detected as having occurred with respect to differing appliances of the differing classes of appliances, in accordance with occurrence time information indicative of occurrence times of the operating state changes included in the state change information; and

acquiring means acquiring a distance between household appliances which incur the operating state changes in the household, based on the calculated occurrence time differences;

wherein said acquiring means calculates the positional relation in accordance with the occurrence time difference of the operating state changes occurred in two appliances and relationship weight information indicative of a distance between the two appliances; and

wherein said relationship weight information is a value calculated by a predetermined expression in accordance with two elements including: number of times of occurring the operating state changes; and the occurrence time difference of the operating state changes occurred in the two appliances.

Claim 12 (Canceled)

Claim 13 (Currently Amended) A system according to claim 12, comprising storing means for storing the occurrence time difference of the operating state changes occurred in the two household appliances and the relationship weight information indicative of the distance between the two household appliances.

Claim 14 (Canceled) --

Allowable Subject Matter

2. Claims 1, 4, 6, 8, 11, and 13 are allowed.
3. The following is an examiner's statement of reasons for allowance:

This communication warrants no examiner's reason for allowance, as applicant's reply makes evident the reason for allowance, satisfying the record as whole as required by rule 37 CFR 1.104(e). In this case, the substance of applicant's remarks filed on 12/18/2006 with respect to the added claim limitation point out the reason claims are patentable over the prior art of record. Thus, the reason for allowance is in all probability evident from the record and no statement for examiner's reason for allowance is necessary (see MPEP 13202.14).

Conclusion


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dinh whose telephone number is (571) 272-

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3936. The examiner can normally be reached on Monday through Friday from 8:00 A.m. to 5:00 P.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung, can be reached on (571) 272-3939. The fax phone number for this group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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